

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006454**Date Inspected:** 02-May-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Huang Wen Pang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG crossbeams**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

**OBG cross beam CB1**

This QA observed ZPMC personnel perform clean up and grinding. No other significant work was observed on this cross beam during the time QA was present.

**OBG cross beam CB2**

This QA noted that this crossbeam has been set into the superstructure assembly. No significant work was observed on this cross beam during the time QA was present.

**OBG cross beam CB3**

This QA received ZPMC Non Destructive Testing (NDT) notification No. 002897 to perform Final Visual Testing (FVT) and Magnetic particle Testing (MT) of approximately 10% of the welds previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA observed that the contractor did not appear to be ready for Caltrans QA FVT and MT inspection at this time. This QA observed numerous personnel performing

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weld and base metal repairs previously rejected by the contractors QC and MT technicians. ZPMC's NDT subcontractor did not appear to be finished with the MT at this time. The contractors QA identified as Mr. Shen Xuejun informed this QA that the FVT and MT have been completed by QC and are ready for QA inspection, however this QA noted that it had started to rain and was unable to perform the MT on the outside surfaces at this time.

## OBG cross beam CB4

This QA observed ZPMC personnel perform clean up and grinding. No other significant work was observed on this cross beam during the time QA was present.

## OBG cross beam CB5

This QA observed ZPMC qualified welding personnel identified as 037705 perform FCAW welding on weld joint identified as FB204-007-069. ZPMC QC CWI identified as Mr. Zhang Yaxu was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-U2-F-1.

This QA observed ZPMC qualified welding personnel identified as 066480 perform SMAW welding on weld joint identified as CB202G-005-140~158. ZPMC QC CWI identified as Mr. Zhang Yaxu was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2113-FCM.

This QA observed ZPMC qualified welding personnel identified as 044790 perform FCAW welding on weld joints identified as FB204-006-087 and 088. ZPMC QC CWI identified as Mr. Zhang Yaxu was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-U2-F.

## OBG cross beam CB6

This QA observed That ZPMC personnel are in the process of fitting and tack welding floorbeam diaphragm sections in this crossbeam.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



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## Summary of Conversations:

As mentioned above.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (15000422372), who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hall,Steven	Quality Assurance Inspector
<b>Reviewed By:</b>	Prue,Erik	QA Reviewer

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